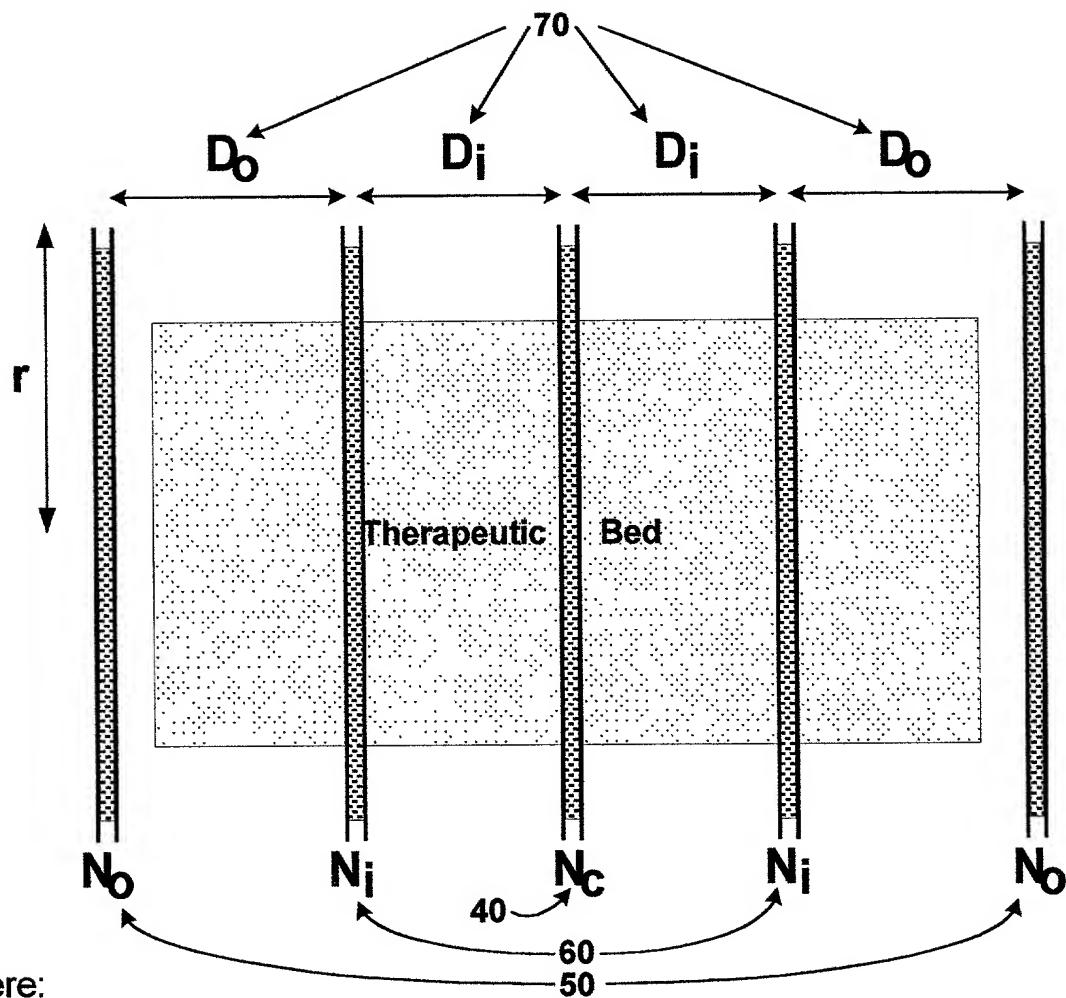


FIG. 1
Orthogonal View of Present Invention



Where:

- D_o = Distance between each end coil and its adjacent coil
- D_i = Distance between the center coil and each of its adjacent coils
- r = radius of each coil
- N_o = Number of turns of wire on each end coil
- N_i = Number of turns of wire on each coil adjacent to an end coil
- N_c = Number of turns of wire on the center coil

NOTE: All distances listed above are center to center distances

FIG. 2
Overhead View of Coil Spacings (for 5 coil system)

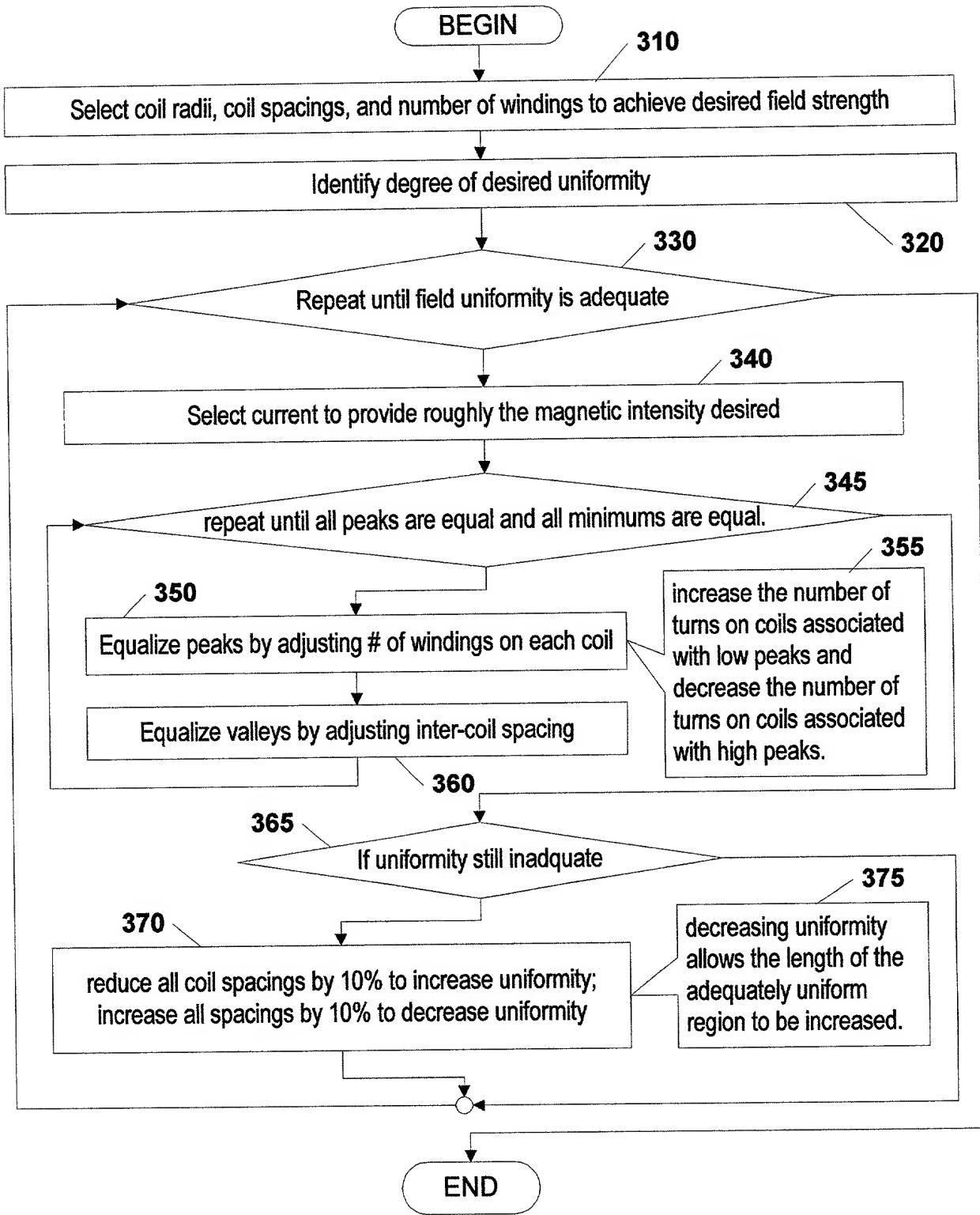


FIG. 3
Process for Developing an Acceptably Uniform Field in a Polycoil System

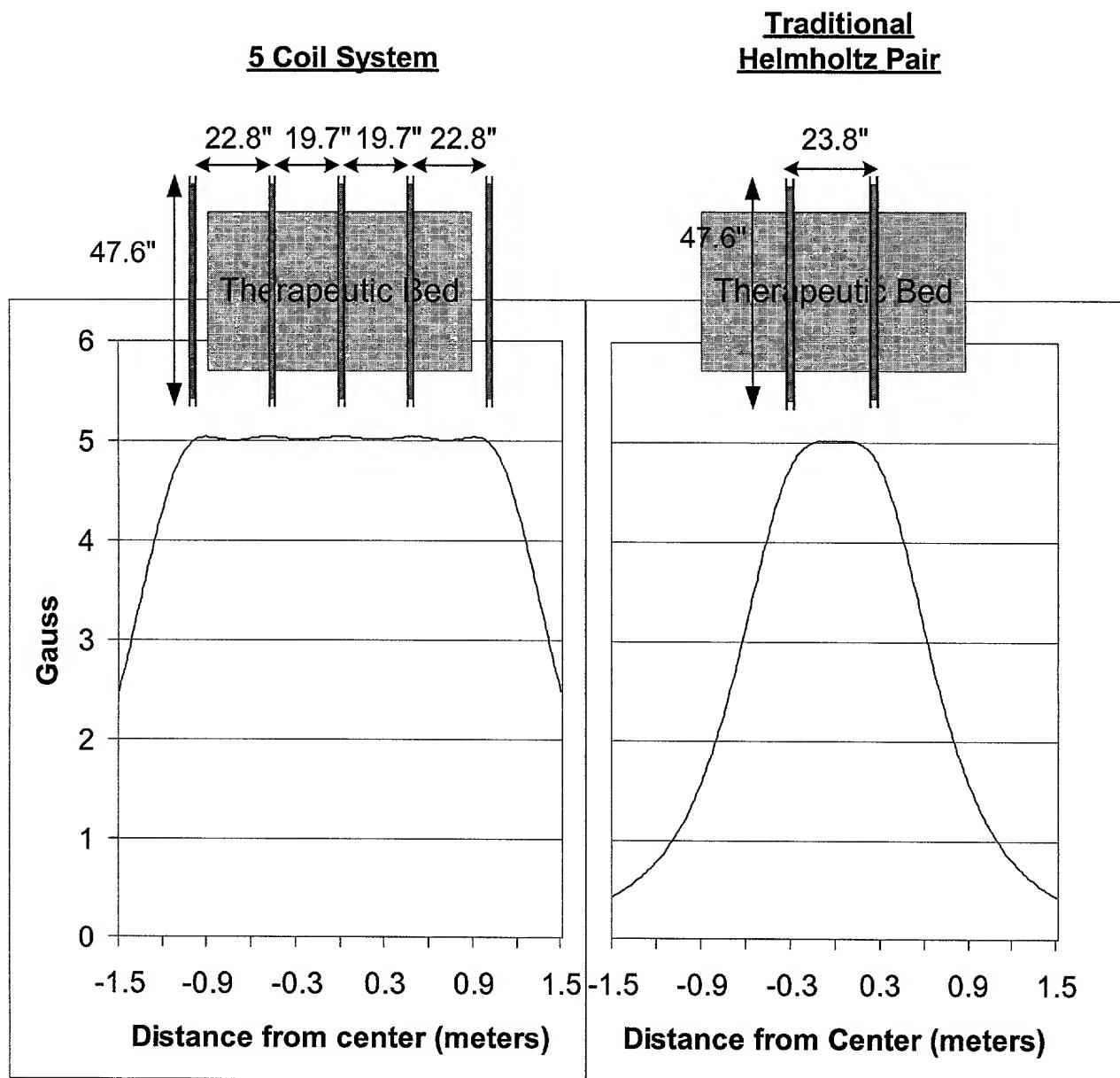


FIG. 4
Overhead View of Coil Spacings
(for 5 coil system and for Traditional Helmholtz Pair)

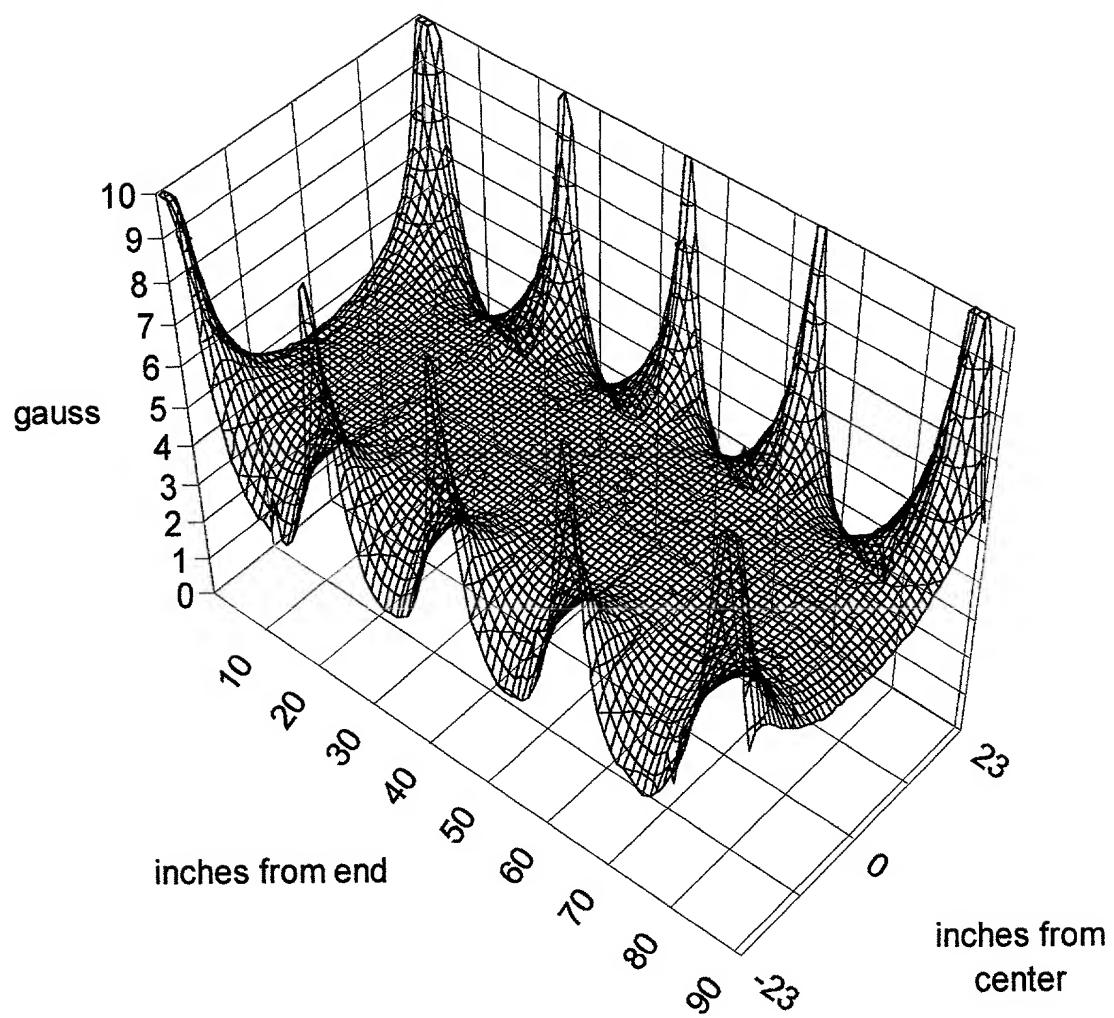
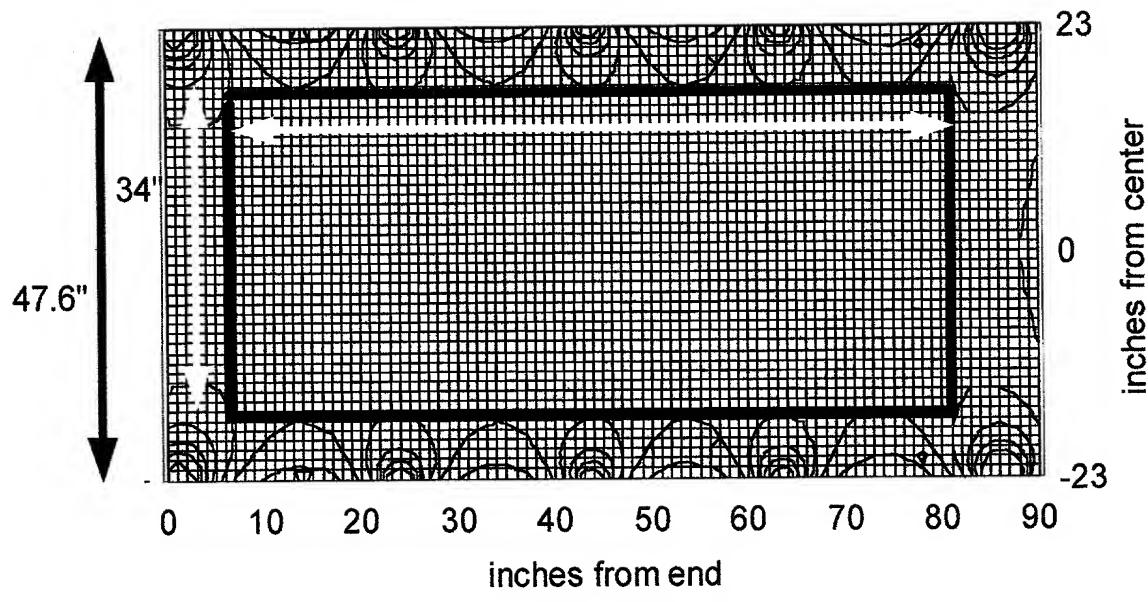


FIG. 5
Magnetic Field Strength of Longitudinal Component



Each curved line = change of 1 Gauss

$34"/47.6" = 71\%$ of diameter of patient surface has a substantially uniform (i.e., 4.5-5.5 Gauss) field strength

FIG. 6
3-D Surface Map of Magnetic Field Strength